

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated in the following listing of all claims:

1. (Original) A centralized notification system for over the air messaging, comprising:
a central server that generates a message to be delivered to a mobile device; and
an active server in communication with the central server that receives the message from
the central server, the active server in communication with a network element that
that communicates with the mobile device,
wherein the active server queries the network element to determine availability of the
mobile device, wherein:
if the availability of the mobile device is returned from the network device, directly
routing the message to the mobile device;
otherwise, routing the message to a passive server; and
wherein the passive server monitors message traffic for an event that provides availability
information about the mobile device and automatically delivers the message to the
mobile device in response thereto.
2. (Original) The centralized notification system recited in claim 1, further comprises
logging results of the delivery of the message in a history database.
3. (Original) The centralized notification system recited in claim 1, wherein the
availability is determined from an echo registration of a registration generated from a mobile
device.
4. (Original) The centralized notification system recited in claim 3, wherein the echo
registration is created and made available at a signal transfer point (STP).
5. (Currently amended) The centralized notification system recited in claim 1, wherein
the passive server receives the availability information about the mobile device without querying
~~the HLR~~ a home location register (HLR).

6. (Currently amended) The centralized notification system recited in claim 1, wherein the message ~~[[are]]~~ is created in response to one or more of various parameters, including implementing at least one of: administration changes to an intelligent routing database; a system change to a subscriber's profile; and changes by an accounting system server.

7. (Original) The centralized notification system recited in claim 1, wherein the central server generates and delivers the message to an active server in response to a new activation of a mobile device.

8. (Currently amended) The centralized notification system recited in claim 1, wherein the ~~at least one server includes~~ passive server is one of multiple passive servers functionally servicing a geographic region.

9. (Original) The centralized notification system recited in claim 8, wherein the passive servers are distributed nationally.

10. (Original) The centralized notification system recited in claim 9, wherein the passive servers are distributed worldwide.

11. (Currently amended) The centralized notification system recited in claim 1, wherein the event from which availability information is obtained is chosen from at least one of: monitoring individual cell towers; monitoring ~~an STP~~ a signal transfer point (STP); monitoring a server; and monitoring traffic between ~~an MSC~~ a mobile switching center (MSC) and ~~an HLR~~ a home location register (HLR).

12. (Original) A method for managing over the air programming to a mobile device, comprising:

generating a message in a central server that is to be downloaded to the mobile device;
 delivering the message to an active server; and
 querying a network element for availability information about the mobile device,
 wherein:

if the availability of the mobile device is positive, directly routing the message to the mobile device,
 otherwise, routing the message to a passive server, wherein the passive server monitors message traffic for an event that provides availability information about the mobile device; and
 downloading the message to the mobile device in response to receiving the availability information.

13. (Currently amended) The method of claim 12, further ~~comprises~~ comprising:
 determining availability information from an echo registration that is automatically sent to the passive server, wherein the echo registration is a copy of a registration generated from a mobile device.

14. (Currently amended) The method of claim 12, further ~~comprises~~ comprising:
 logging results of the delivery of the message in a history database.

15. (Currently amended) A centralized notification system for over the air programming, comprising:
 a central server that generates a message to be delivered to a mobile device; and
 at least one passive server located in a region in which a mobile device is homed in communication with the central server that receives the message from the central server, the passive server in communication with a network element that communicates with the mobile device,
 wherein the passive server monitors message traffic for an event that provides availability information about the mobile device and downloading the message to the mobile device in response thereto,
wherein the central server delivers the message to an active server in response to a new activation of a mobile device.

16. (Original) The centralized notification system recited in claim 15, wherein the availability is determined from an echo registration of a registration generated from a mobile device.

17. (Currently amended) The centralized notification system recited in claim 15, further ~~comprises~~ comprising logging results of the delivery of the message in a history database.

18. (Currently amended) The centralized notification system recited in claim 15, wherein the passive server receives the availability information about the mobile device without having to query ~~the HLR~~ a home location register (HLR).

19. (Original) The centralized notification system recited in claim 15, wherein the message can be created in response to various parameters, including implementing at least one of: administration changes to an intelligent routing database; a system change to a subscriber's profile; and changes by an accounting system server.

20. (Canceled).

21. (Currently amended) The centralized notification system recited in claim 15, wherein the at least one passive server includes multiple passive servers functionally servicing a geographic region.

22. (Original) The centralized notification system recited in claim 21, wherein the passive servers are distributed nationally.

23. (Original) The centralized notification system recited in claim 22, wherein the passive servers are distributed worldwide.

24. (Original) The centralized notification system recited in claim 15, wherein an echo registration is created and made available to a signal transfer point (STP).

25. (Currently amended) The centralized notification system recited in claim 15, wherein the event from which availability information is obtained is chosen from at least one of: monitoring individual cell towers; monitoring ~~an STP~~ a signal transfer point (STP); monitoring a server; and monitoring traffic between ~~an MSC~~ a mobile switching center (MSC) and ~~an HLR~~ a home location register (HLR).

26. (Canceled)

27. (Canceled)

28. (Original) A carrier wave encoded to transmit a control program usable for a centralized notification system to a device for executing the control program, the control program including instructions comprising:

instructions for generating a message in a central server that is to be downloaded to the mobile device;

instructions for delivering the message to an active server; and

instructions for querying a network element for availability information about the mobile device, wherein:

if the availability of the mobile device is positive, directly routing the message to the mobile device,

otherwise, routing the message to a passive server, wherein the passive server monitors message traffic for an event that provides availability information about the mobile device; and

instructions for downloading the message to the mobile device in response to receiving the availability information.

29. (Currently amended) The ~~method~~ carrier wave of claim 28, wherein the ~~attempt to locate and deliver the message~~ querying is performed by the ~~first~~ active server in which an ~~HLR~~ a home location register (HLR) is queried for a registration that provides availability information about the mobile device.

30. (Currently amended) The ~~method~~ carrier wave of claim 28, ~~further comprises:~~ determining wherein the network element determines availability information from an echo registration automatically sent to the network element, wherein the echo registration is a copy of a registration generated from a mobile device.

31. (Currently amended) The ~~method~~ carrier wave of claim 28, ~~further comprises:~~

~~logging wherein the central server logs~~ results of the delivery of the message in a history database.

32. (Currently amended) A carrier wave encoded to transmit a control program usable for a centralized notification system to a device for executing the control program, the control program including instructions, comprising:

instructions for generating a message in a central server that is to be downloaded to the mobile device; ~~and~~

instructions for delivering the message to a passive server in a region in which the mobile device is homed[.,,];

instructions for monitoring message traffic for an event that provides availability information about the mobile device and automatically downloading the message in response thereto; and

instructions for delivering the message to an active server in response to a new activation of a mobile device.

33. (Original) A method of updating an intelligent routing database (IRDB) in a mobile device, comprising:

generating a message to be delivered to a mobile device;

delivering the message to an active server; and

querying a network element for availability information about the mobile device, wherein:

if the availability of the mobile device is positive, delivering the message to the mobile device and updating the IRDB,

otherwise, routing the message to a passive server that monitors message traffic for an event to occur that provides availability information about the mobile device; and

delivering the message to the mobile device in response thereto.